IN THE CLAIMS

Claims 1-25 (canceled)

26 (currently amended) A method of applying a slidable anticorrosive layer to a metallic substrate, comprising applying a mixture comprising a polymeric organic binder, a low-molecular monomeric liquid compound to be subjected to free-radical polymerization, a compound forming radicals under the influence of actinic radiation, and at least 20% by weight of a conductive inorganic pigment selected from the group consisting of magnetizable oxides of iron, phosphates of iron, phosphides of iron, phosphates of aluminum, phosphides of aluminum, and graphite coated mica pigments to the surface of a metallic substrate and irradiating the applied mixture with actinic radiation of such an intensity and for such a period that a firm, hard, and sufficiently tough, corrosion-resistant layer is formed, wherein the slidable anticorrosive layer is electroconductive and the electroconductivity of the layer is provided only by said inorganic pigment, wherein the coating mixture is applied to obtain a layer thickness of 2 to 8 microns.

27 (canceled)

28 (previously presented) A method of applying a slidable anticorrosive layer to a metallic substrate, comprising applying a mixture comprising a polymeric organic binder, a low-molecular monomeric liquid compound to be subjected to free-radical polymerization, a compound forming radicals under the influence of actinic radiation, and at least 20% by weight of a conductive inorganic pigment selected from the group consisting of magnetizable oxides of iron, phosphates of iron, phosphides of iron, phosphates of aluminum, phosphides of aluminum, and graphite coated mica pigments to the surface of a metallic substrate and irradiating the applied mixture with actinic radiation of such an intensity and for such a period that a firm, hard, and sufficiently tough, corrosion-resistant layer is formed, wherein the slidable anticorrosive layer is electroconductive and the electroconductivity of the layer is provided only by said inorganic pigment ~~The method as claimed in claim 26~~, wherein the substrate to be coated is a steel sheet which has previously been zinc-coated or chromatized or has been pretreated with a composition that is free of chromate.

29 (previously presented) The method as claimed in claim 26, wherein said coating and said curing are effected sequentially and the layer cured by radiation is optionally postcured thermally.

30 (previously presented) A flexible metal sheet which is electrolytically zinc-coated or hot-dip coated or chromatized or pretreated with a composition that is free of chromate and has an organic layer applied thereto, which layer is prepared by the method as claimed in claim 26.

31. (currently amended) A method of applying a slidable anticorrosive layer to a metallic substrate, comprising applying a mixture consisting of a polymeric organic binder, a low-molecular monomeric liquid compound to be subjected to free-radical polymerization, a compound forming radicals under the influence of actinic radiation, and at least 20% by weight of a conductive inorganic pigment selected from the group consisting of magnetizable oxides of iron, phosphates of iron, phosphides of iron, phosphates of aluminum, phosphides of aluminum, and graphite coated mica pigments to the surface of a metallic substrate and irradiating the applied mixture with actinic radiation of such an intensity and for such a period that a firm, hard, and sufficiently tough, corrosion-resistant layer is formed, wherein the slidable anticorrosive layer is electroconductive and the electroconductivity of the layer is provided only by said inorganic pigment, wherein the coating mixture is applied to obtain a layer thickness of 2 to 8 microns.

32. (canceled)

33. (previously presented) A method of applying a slidable anticorrosive layer to a metallic substrate, comprising applying a mixture consisting of a polymeric organic binder, a low-molecular monomeric liquid compound to be subjected to free-radical polymerization, a compound forming radicals under the influence of actinic radiation, and at least 20% by weight of a conductive inorganic pigment selected from the group consisting of magnetizable oxides of iron, phosphates of iron, phosphides of iron, phosphates of aluminum, phosphides of aluminum, and graphite coated mica pigments to the surface of a metallic substrate and irradiating the applied mixture with actinic radiation of such an intensity and for such a period that a firm, hard, and sufficiently tough, corrosion-resistant layer is formed wherein the slidable anticorrosive

layer is electroconductive and the electroconductivity of the layer is provided only by said inorganic pigment and ~~The method as claimed in claim 31~~, wherein the substrate to be coated is a steel sheet which has previously been zinc-coated or chromatized or has been pretreated with a composition that is free of chromate.

34. (previously presented) The method as claimed in claim 31, wherein said coating and said curing are effected sequentially and the layer cured by radiation is optionally postcured thermally.

35. (previously presented) A flexible metal sheet which is electrolytically zinc-coated or hot-dip coated or chromatized or pretreated with a composition that is free of chromate and has an organic layer applied thereto, which layer is prepared by ~~the~~ a method comprising applying a mixture consisting of a polymeric organic binder, a low-molecular monomeric liquid compound to be subjected to free-radical polymerization, a compound forming radicals under the influence of actinic radiation, and at least 20% by weight of a conductive inorganic pigment selected from the group consisting of magnetizable oxides of iron, phosphates of iron, phosphides of iron, phosphates of aluminum, phosphides of aluminum, and graphite coated mica pigments to the surface of a metallic substrate and irradiating the applied mixture with actinic radiation of such an intensity and for such a period that a firm, hard, and sufficiently tough, corrosion-resistant layer is formed, wherein the slidable anticorrosive layer is electroconductive and the electroconductivity of the layer is provided only by said inorganic pigment ~~as claimed in claim 31~~.

36 -45 (canceled)

46. (currently amended) A method of applying a slidable anticorrosive layer to a metallic substrate, comprising applying a mixture comprising a polymeric organic binder, a low-molecular monomeric liquid compound to be subjected to free-radical polymerization, a compound that forms radicals under the influence of actinic radiation, and at least 20% ~~10%~~ by weight of a conductive inorganic selected from the group consisting of oxides of iron, phosphates of iron, phosphides of iron, oxides of aluminum, phosphates of aluminum, phosphides of aluminum, and graphite coated mica pigments to the surface of a metallic substrate and irradiating the applied mixture with actinic radiation of such an intensity and for

such a period that a firm, hard, and sufficiently tough, corrosion-resistant layer is formed, wherein the slidable anticorrosive layer is electroconductive and the electroconductivity of the layer is provided only by said inorganic pigment, wherein the coating mixture is applied to obtain a layer thickness of 2 to 8 microns.

47. (canceled)

48. (previously presented) A method of applying a slidable anticorrosive layer to a metallic substrate, comprising applying a mixture comprising a polymeric organic binder, a low-molecular monomeric liquid compound to be subjected to free-radical polymerization, a compound that forms radicals under the influence of actinic radiation, and at least 20% by weight of a conductive inorganic selected from the group consisting of oxides of iron, phosphates of iron, phosphides of iron, oxides of aluminum, phosphates of aluminum, phosphides of aluminum, and graphite coated mica pigments to the surface of a metallic substrate and irradiating the applied mixture with actinic radiation of such an intensity and for such a period that a firm, hard, and sufficiently tough, corrosion-resistant layer is formed, wherein the slidable anticorrosive layer is electroconductive and the electroconductivity of the layer is provided only by said inorganic pigment and ~~The method as claimed in claim 46,~~ wherein the substrate to be coated is a steel sheet which has previously been zinc-coated or chromatized or has been pretreated with a composition that is free of chromate.

49. (previously presented) A method of applying a slidable anticorrosive layer to a metallic substrate, comprising applying a mixture comprising a polymeric organic binder, a low-molecular monomeric liquid compound to be subjected to free-radical polymerization, a compound that forms radicals under the influence of actinic radiation, and at least 20% by weight of a conductive inorganic selected from the group consisting of oxides of iron, phosphates of iron, phosphides of iron, oxides of aluminum, phosphates of aluminum, phosphides of aluminum, and graphite coated mica pigments to the surface of a metallic substrate and irradiating the applied mixture with actinic radiation of such an intensity and for such a period that a firm, hard, and sufficiently tough, corrosion-resistant layer is formed, wherein the slidable anticorrosive layer is electroconductive and the electroconductivity of the layer is provided only by said inorganic pigment, and ~~The method as claimed in claim 46,~~ wherein said coating and said curing are effected sequentially in one step and the layer cured by radiation is optionally postcured thermally.

50. (previously presented) A flexible metal sheet which is electrolytically zinc-coated or hot-dip coated or chromatized or pretreated with a composition that is free of chromate and has an organic layer applied thereto, which layer can be obtained by a ~~the~~ method comprising applying a mixture comprising a polymeric organic binder, a low-molecular monomeric liquid compound to be subjected to free-radical polymerization, a compound that forms radicals under the influence of actinic radiation, and at least 20% by weight of a conductive inorganic selected from the group consisting of oxides of iron, phosphates of iron, phosphides of iron, oxides of aluminum, phosphates of aluminum, phosphides of aluminum, and graphite coated mica pigments to the surface of a metallic substrate and irradiating the applied mixture with actinic radiation of such an intensity and for such a period that a firm, hard, and sufficiently tough, corrosion-resistant layer is formed, wherein the slidable anticorrosive layer is electroconductive and the electroconductivity of the layer is provided only by said inorganic pigment ~~as claimed in claim 46~~.

51-58 (canceled)

59 (new) A method of applying a slidable anticorrosive layer to a metallic substrate, comprising applying a mixture comprising a polymeric organic binder, a low-molecular

monomeric liquid compound to be subjected to free-radical polymerization, a compound forming radicals under the influence of actinic radiation, and at least 20% by weight of a conductive inorganic pigment selected from the group consisting of magnetizable oxides of iron, phosphates of iron, phosphides of iron, phosphates of aluminum, phosphides of aluminum, and graphite coated mica pigments to the surface of a metallic substrate and irradiating the applied mixture with actinic radiation of such an intensity and for such a period that a firm, hard, and sufficiently tough, corrosion-resistant layer is formed, wherein the layer is electroconductive and the electroconductivity is provided only by said conductive inorganic pigment.

60 (new) The method as claimed in claim 59, wherein the substrate to be coated is a steel sheet which has previously been zinc-coated or chromatized or has been pretreated with a composition that is free of chromate, wherein the coating mixture is applied to obtain a layer thickness of 2 to 8 μm.

61 (new) The method as claimed in claim 59, wherein said coating and said curing are effected sequentially and the layer cured by radiation is optionally postcured thermally, wherein the coating mixture is applied to obtain a layer thickness of 2 to 8 μm.

62 (new) A flexible metal sheet which is electrolytically zinc-coated or hot-dip coated or chromatized or pretreated with a composition that is free of chromate and has an organic layer applied thereto, which layer is prepared by the method as claimed in claim 59.

63. (new) A method of applying a slidable anticorrosive layer to a metallic substrate, comprising applying a mixture consisting of a polymeric organic binder, a low-molecular monomeric liquid compound to be subjected to free-radical polymerization, a compound forming radicals under the influence of actinic radiation, and at least 20% by weight of a conductive inorganic pigment selected from the group consisting of magnetizable oxides of iron, phosphates of iron, phosphides of iron, phosphates of aluminum, phosphides of aluminum, and graphite coated mica pigments to the surface of a metallic substrate and irradiating the applied mixture with actinic radiation of such an intensity and for such a period that a firm, hard, and sufficiently tough, corrosion-resistant layer is formed, wherein the layer is electroconductive and the electroconductivity is provided only by said conductive inorganic pigment.

64. (new) The method as claimed in claim 63, wherein the substrate to be coated is a steel sheet which has previously been zinc-coated or chromatized or has been pretreated with a composition that is free of chromate, and wherein the coating mixture is applied to obtain a layer thickness of 2 to 8 microns.

65. (new) The method as claimed in claim 63, wherein said coating and said curing are effected sequentially and the layer cured by radiation is optionally postcured thermally, and wherein the coating mixture is applied to obtain a layer thickness of 2 to 8 microns.

66. (new) A flexible metal sheet which is electrolytically zinc-coated or hot-dip coated or chromatized or pretreated with a composition that is free of chromate and has an organic layer applied thereto, which layer is prepared by the method as claimed in claim 63.

67. (new) A method of applying a slidable anticorrosive layer to a metallic substrate, comprising applying a mixture comprising a polymeric organic binder, a low-molecular monomeric liquid compound to be subjected to free-radical polymerization, a compound that forms radicals under the influence of actinic radiation, and at least 10% by weight of a conductive inorganic selected from the group consisting of oxides of iron, phosphates of iron, phosphides of iron, oxides of aluminum, phosphates of aluminum, phosphides of aluminum, and graphite coated mica pigments to the surface of a metallic substrate and irradiating the applied mixture with actinic radiation of such an intensity and for such a period that a firm, hard, and sufficiently tough, corrosion-resistant layer is formed, wherein the layer is electroconductive and the electroconductivity is provided only by said inorganic pigment.

68. (new) The method as claimed in claim 67, wherein the substrate to be coated is a steel sheet which has previously been zinc-coated or chromatized or has been pretreated with a composition that is free of chromate, and wherein the mixture is applied to obtain a layer thickness of 2 to 8 microns.

69. (new) The method as claimed in claim 67, wherein said coating and said curing are effected sequentially in one step and the layer cured by radiation is optionally postcured thermally, and wherein the mixture is applied to obtain a layer thickness of 2 to 8 microns.

70. (new) A flexible metal sheet which is electrolytically zinc-coated or hot-dip

coated or chromatized or pretreated with a composition that is free of chromate and has an organic layer applied thereto, which layer can be obtained by the method as claimed in claim 67.

71. (new) The method as claimed in claim 43, wherein said inorganic pigment comprises magnetizable iron oxide.

72. (new) The method as claimed in claim 63, wherein the conductive inorganic pigment comprises magnetizable iron oxide.

73. (new) The method as claimed in claim 59, wherein the conductive inorganic pigment comprises magnetizable iron oxide.

74. (new) The method of claim 26, wherein the layer is electroconductive, wherein the electroconductivity of the layer is provided only by said pigment.